

REMARKS

In the Office Action, the Examiner requested Applicants to provide the reference of the prior art cited at page 2, line 23 to page 3, line 1 of the specification. That portion of the specification describes “. . . a document showing a system in which image data is compressed in a DCT manner, stored in an IC card, and further stored in DAT.”

Applicants submit copies of a reference entitled “Fujix Memorycard Camera DS-X” and document from Toshiba, which falls in the category covering the statement referred to at page 2, line 23 to page 3, line 1 of the specification. These references do not specifically mention DCT encoding, but do state that the respective cameras can use ADPCM (Adaptive Differential Pulse Code Modulation), which includes DCT encoding.

Status Of Application

Claims 20-22, 31-34, 37, and 40-51 are pending in the application; the status of the claims is as follows:

Claims 21, 22, and 43 are rejected under the first paragraph of 35 U.S.C. § 112 as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 51 is rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,737,014 to Tojo et al. (hereinafter the “Tojo patent”).

Claims 20-30, 33, 43, 44, and 47-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Publication 6-447177 to Okamoto (hereinafter the “Okamoto publication”) in view of U.S. Patent No. 5,034,804 to Sasaki et al. (hereinafter the “Sasaki ‘804 patent”).

Claim 34 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto publication in view of the Sasaki ‘804 patent as applied to claim 20 above, and further in view of U.S. Patent No. 4,937,676 to Finelli (hereinafter the “Finelli patent”).

Claims 40-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto patent in view of the Sasaki '804 patent and U.S. Patent No. 4,897,732 to Kinoshita et al. (hereinafter the "Kinoshita patent").

Claims 45 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto patent in view of the Sasaki '804 patent as applied to claims 43 and 44 above, and further in view of the Kinoshita patent.

Claims 20-30, 33, 43, 44, and 47-50 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,067,029 to Takahashi (hereinafter the "Takahashi patent") in view of the Sasaki '804 patent.

Claim 34 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent as applied to claim 20 above, and further in view of the Finelli patent.

Claims 40-42 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent and the Kinoshita patent.

Claims 45 and 46 are rejected under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent and the Kinoshita patent.

Claims 31, 37, and 51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,032,927 to Watanabe et al. (hereinafter the "Watanabe patent") in view of U.S. Patent No. 4,837,628 to Sasaki (hereinafter the "Sasaki '628 patent").

Claims 31, 37, and 51 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 4,963,995 to Lang (hereinafter the "Lang patent"), in view of the Sasaki '804 patent.

Claim 32 is rejected under 35 U.S.C. § 103(a) as being unpatentable over the Lang patent in view of the Sasaki '804 patent as applied to claim 31 above, and further in view of the Watanabe patent.

Claim Amendments

Claims 20, 40, 43, 49, and 51 have been amended to more particularly point out and distinctly claim at least one embodiment of the invention. These changes do not introduce any new matter.

35 U.S.C. § 112 Rejection

The rejection of claims 21, 22, and 43 under the first paragraph of 35 U.S.C. § 112 as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, is respectfully traversed based on the following.

Specifically, the rejection states that “[t]he specification fails to describe a first memory contain [*sic*] a [*sic*] IC card as now being recited in claims 21, 22 and 43.” None of the claims 21, 22, and 43, however, recite that limitation. First, claim 21 does not recite an IC card as alleged in the rejection. Second, claim 22 explicitly recites that “the first semiconductor memory *is an* IC card.” (Emphasis added.) As noted in the rejection, “the specification teaches that the memory that stored the image information from a buffer is an IC card.” Thus, the recitation contained in claim 21 is supported by the specification by the very terms included in the rejection. Third, claim 43 does not recite an IC card as alleged in the rejection.

Accordingly, it is respectfully requested that the rejection of claims 21, 22, and 43 under the first paragraph of 35 U.S.C. § 112 as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, be reconsidered and withdrawn.

35 U.S.C. § 102(e) Rejection

The rejection of claim 51 under 35 U.S.C. § 102(e) as being anticipated by the Tojo patent, is respectfully traversed based on the following.

The Tojo patent assertedly discloses an electronic camera 1 with two detachable memory means 27, 2. The camera 1 is capable of receiving and storing an image on the first detachable memory means 27. (Col. 5, lines 20-30.) (Note that the frame memory 7 is included in the memory means 27.) Additionally, a recorder 2 (i.e., assertedly a detachable memory means) may be used to record the images contained in the first detachable memory means 27. The images, however, are recorded in memory means 2 in the same format as the images recorded in memory means 27.

In contrast, Applicants' claim 51 recites that the image received from the memory card must be *restored* to the original image. Specifically, claim 51 recites the step of "restoring received image information to original image information originally obtained in a photographing operation."

The Tojo patent does not disclose, teach, or suggest having to restore the image received from memory card to the original image obtained in a photographing operation. The rejection apparently recites column 3, lines 39-42, for the proposition that the recording signal processing circuit 19 and the D/A converter 9 as a processing means fulfills the step of restoring the received image. The Tojo patent, however, merely states that the recording signal processing circuit receptive of the "output of the D/A converter which changes the video signal on the frame memory 7 to the analog signal produces an output signal which is supplied to a recording disk 20." (Column 3, lines 39-43.) In other words, the D/A converter changes the image from digital to an analog signal for the purpose recording the information on disk 20 (column 3, lines 39-50). The analog signal is processed and supplied to the recording disk 20 by the recording signal processing circuit 19. Importantly, the *image information is the same* throughout this process. Therefore, the recording signal processing circuit 19 cannot restore the received image to

the original image information as recited in claim 51. Nowhere does the Tojo patent disclose that the image information must be restored to the original image information.

Accordingly, it is respectfully requested that the rejection of claim 51 under 35 U.S.C. § 102(e) as being anticipated by the Tojo patent, be reconsidered and withdrawn.

35 U.S.C. § 103(a) Rejections

Claims 20-22, 33, 43, 44, and 47-50

The rejection of claims 20-22, 33, 43, 44, and 47-50 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto publication in view of the Sasaki '804 patent, is respectfully traversed based on the following.

The Okamoto publication shows a digital camera 1 having a memory 14 mounted in digital camera 1. An external storage device 2 is connected via interface 16 and cable 8. Images are captured using sensor 44, processed using processor 12 and stored on memory 14. When a prescribed number of images are stored in memory 13, the processor 12 switches to storing the images on external storage 2.

The Sasaki patent shows digital camera 10 using a removable memory card 15. Image output from the camera is transferred from image capture circuitry to buffer memory 31₆ and then transferred to memory card 15. Upon each image capture, directory information from the memory card is fetched (column 9, lines 4-15). This information is used to determine if storage space is available on memory card 15 for the captured image. If there is not sufficient space, the image is held in the buffer memory and an alarm is sounded to alert the user (column 9, lines 20-27). Once a new memory card has been inserted, the image held in the buffer memory is immediately stored in the new memory card (column 9, lines 27-28). There is no suggestion to provide permanent storage in any memory other than a memory card.

In contrast to the cited prior art, claim 20 includes:

a detector to detect, upon each photographing operation, a memory condition; and

a changer, coupled to said detector, to selectively determine which one of the first and second semiconductor memories is used to store image information outputted from said imaging device based on a detected condition by said detector, and change between a first condition and a second condition, wherein image information outputted from said imaging device is to be directed to the first connection for storage on a connected first semiconductor memory in the first condition, and image information outputted from said imaging device is to be directed to the second connection for storage on a connected second semiconductor memory in the second condition.

The cited references do not show or suggest a changer that changes between a condition of storing images on the first memory and a condition of storing images in a second memory based upon a detected condition of a memory. The Okamoto publication merely counts the number of images stored, which is only effective when the storage space required for each image is fixed. The device of the Sasaki patent does not attempt to change any storage operation, but rather simply alerts the user that the memory is full. There is no suggestion in either reference to change the condition of the image storage operation based on a memory condition.

The Office Action states on page 4, lines 11-15:

It would have been obvious to one of ordinary skill in the art to modify Okamoto with Sasaki by using a detecting means as taught by Sasaki with the apparatus of Takahashi for detecting an available capacity of the memory and for generating a representative of the result in order to inform the user the status of the memory thereby preventing error in the recording of the image signal.

However, the Office Action does not state that any of the references suggest "a changer, coupled to said detector, to selectively determine which one of the first and second semiconductor memories is used to store image information outputted from said imaging device based on a detected condition by said detector" Moreover, the Office Action does not state where such a suggestion exists in the prior art. The first element of a *prima*

facie case for obviousness, as stated in MPEP §2143, is to show a suggestion or motivation in the prior art to modify or combine the references as provided in the claim.

First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

...
The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure.

With regard to this element of §2143, the rejection does not cite any suggestion or motivation in the prior art to combine the Okamoto publication and the Sasaki patent in the manner claimed. Therefore, the burden of presenting a *prima facie* case for obviousness has not been met.

The purpose of the suggestion requirement is to prevent hindsight analysis. "Our case law makes clear that the best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references." *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). It is clear from the rejection that the only suggestion to make the combination of the cited references comes from Applicant's written description. This is the essence of impermissible hindsight.

"The result is that the claims were used as a frame, and individual, naked parts of separate prior art references were employed as a mosaic to recreate a facsimile of the claimed invention. ... To imbue one of ordinary skill in the art with knowledge of the invention in suit, when no prior art reference or references of record convey or suggest that knowledge is to fall victim to the insidious affect of hindsight syndrome wherein that which only the inventor taught is used against its teacher." *W.L. Gore & Assocs., Inc. v. Garlock, Inc.*, 721 F.2d 1540, 1552-3, 220 USPQ 303, 312-13 (Fed. Cir. 1983)

Claims 20, 43, and 49 have been amended to recite at least one of the distinguishing characteristics of Applicants' invention. Specifically, claims 20, 43, and 49 have been amended to recite that the detector to detects "upon each photographing

operation, a memory condition” and that in a second condition of the changer the “image information outputted from said imaging device is to be directed to the first connection for storage on a connected first semiconductor memory in the first condition, and image information outputted from said imaging device is to be directed to the second connection for storage on a connected second semiconductor memory in the second condition.” Support for these amendments is contained in the Application as filed, and, therefore, no new matter is being added.

In contrast, Okamoto discloses only that images are stored in the first memory until the first memory is saturated, after which images are stored in the second memory. The saturation condition is solely determined by the number of images stored. Furthermore, Sasaki does not teach or disclose a changer in any form and, thus, cannot disclose the changer as amended. Thus, claims 20, 43, and 49 are patentably distinct from the cited prior art.

Claims 21, 22, 33, 44, 47-48, and 50 depend from and further limit independent claims 20, 43, and 49 in a patentable sense and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 20-22, 33, 43, 44, and 47-50 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto publication in view of the Sasaki ‘804 patent, be reconsidered and withdrawn.

Claim 34

The rejection of claim 34 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto publication in view of the Sasaki ‘804 patent as applied to claim 20 above, and further in view of the Finelli patent, is respectfully traversed based on the following.

The Finelli patent uses a single storage device 80, and thus does not add any additional elements to those shown in the Takahashi and Sasaki patents as explained above.

Claim 34 depends from and further limits independent claim 20 in a patentable sense. As illustrated above, claim 20 is patentable over the cited prior art. Thus, for this reason and the reasons set forth above, claim 34 is also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claim 34 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto publication in view of the Sasaki '804 patent as applied to claim 20 above, and further in view of the Finelli patent, be reconsidered and withdrawn.

Claim 40-42

The rejection of claims 40-42 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto patent in view of the Sasaki '804 patent and the Kinoshita patent, is respectfully traversed based on the following.

The Kinoshita patent shows an image capture device capable of storing an image in a frame memory 7 or on a disk recording section 2. Using a switch 11, images may be presented on a monitor 10 from the image capture CCD 4 (column 2, line 66 – column 3, line 4), the disk recording section 2 (column 3, line 67 – column 4, line 2) or the frame memory 7 (column 3, lines 5-8).

Claim 40 has been amended to recite at least one of the distinguishing characteristics of Applicants' invention. Specifically, claim 40 has been amended to recite that in a second condition of the changer *the image information stored in the connected first semiconductor memory is directed to the second connection for storage on a connected second semiconductor memory*. Support for this amendment is contained in the Application as filed, and, therefore, no new matter is being added.

As discussed above, the Okamoto patent discloses only that images are stored in the first memory until the first memory is saturated, after which images are stored in the second memory. Furthermore, the Sasaki and Kinoshita patents do not teach or disclose a

changer as recited in claim 40. Thus, claim 40 is patentably distinct from the cited prior art.

Claims 41-42 depend from and further limit independent claim 40 in a patentable sense and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 40-42 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto patent in view of the Sasaki '804 patent and the Kinoshita patent, be reconsidered and withdrawn.

Claim 45-46

The rejection of claims 45 and 46 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto patent in view of the Sasaki '804 patent as applied to claims 43 and 44 above, and further in view of the Kinoshita patent, is respectfully traversed based on the following.

Claims 45-46 depend from and further limit independent claim 43 in a patentable sense and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 45 and 46 under 35 U.S.C. § 103(a) as being unpatentable over the Okamoto patent in view of the Sasaki '804 patent as applied to claims 43 and 44 above, and further in view of the Kinoshita patent, be reconsidered and withdrawn.

Claim 20-22, 33, 43, 44, and 47-50

The rejection of claims 20-22, 33, 43, 44, and 47-50 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent, is respectfully traversed based on the following.

Claims 20, 43, and 49 have been amended to recite at least one of the distinguishing characteristics of Applicants' invention. Specifically, claims 20, 43, and 49 have been amended to recite that in a second condition of the changer *the image information stored in the connected first semiconductor memory is directed to the second connection for storage on a connected second semiconductor memory*. Support for these amendments is contained in the Application as filed, and, therefore, no new matter is being added.

Neither the Takahishi nor the Sasaki patents teach or disclose a changer as recited in claims 20, 43, and 49. Thus, claim claims 20, 43, and 49 are patentably distinct from the cited prior art.

Claims 21, 22, 33, 44, 47-48, and 50 depend from and further limit independent claims 20, 43, and 49 in a patentable sense and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 20-22, 33, 43, 44, and 47-50 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent, be reconsidered and withdrawn.

Claim 34

The rejection of claim 34 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent as applied to claim 20 above, and further in view of the Finelli patent, is respectfully traversed based on the following.

Claim 34 depends from and further limit independent claim 20 in a patentable sense. As discussed above, claim 20 is patentable. Thus, for this reason and the reasons set forth above, claim 34 is also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claim 34 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki

'804 patent as applied to claim 20 above, and further in view of the Finelli patent, be reconsidered and withdrawn.

Claims 40-42

The rejection of claims 40-42 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent and the Kinoshita patent, is respectfully traversed based on the following.

Claim 40 has been amended to recite at least one of the distinguishing characteristics of Applicants' invention. Specifically, claim 40 has been amended to recite that the detector to detects "upon each photographing operation, an available memory capacity" and that the "wherein image information outputted from said imaging device is to be directed to the first connection for storage on a connected first semiconductor memory in the first condition, and image information outputted from said imaging device is to be directed to the second connection for storage on a connected second semiconductor memory in the second condition[.]" Support for this amendments is contained in the Application as filed, and, therefore, no new matter is being added.

As noted above, there is no suggestion in the cited prior art to combine the cited art in the manner claimed as present in the Office Action. None of the cited references teach or disclose a changer as recited in claim 40. Therefore, the Office Action does not make a case for *prima facie* obviousness and claim 40 is patentably distinct from the cited prior art.

Claims 41 and 42 depend from and further limit independent claim 40 in a patentable sense and, for this reason and the reasons set forth above, are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 40-42 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent and the Kinoshita patent, be reconsidered and withdrawn.

Claims 45 and 46

The rejection of claims 45 and 46 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent and the Kinoshita patent, is respectfully traversed based on the following.

Claims 45 and 46 depend from and further limit independent claim 43 in a patentable sense. As discussed above, claim 43 is patentable over the cited references. Thus, for this reason and the reasons set forth above, claims 45 and 46 are also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 45 and 46 under 35 U.S.C. § 103(a) as being unpatentable over the Takahashi patent in view of the Sasaki '804 patent and the Kinoshita patent, be reconsidered and withdrawn.

Claims 31, 37, and 51 (Watanabe and Sasaki patents)

The rejection of claims 31, 37, and 51 under 35 U.S.C. § 103(a) as being unpatentable over the Watanabe patent in view of the Sasaki '628 patent, is respectfully traversed based on the following.

The Watanabe patent assertedly discloses an apparatus that performs an orthogonal transformation and a compression coding on image data so as the image data may be recorded in memory. The Watanabe patent also discloses a playback apparatus that reads the recorded image data contained in the memory for display purposes. Importantly, the Watanabe patent *does not teach or suggest storing the decompressed image information.*

The Sasaki patent assertedly discloses digital camera 10 using a removable memory card 15. Image output from the camera is transferred from image capture circuitry to buffer memory 316 and then transferred to memory card 15.

The rejection states that the combination of the Watanabe patent and the Sasaki patent teaches claim 31, which states:

31. An editing device for use with a memory card having a relatively small capacity and for storing image information taken by a camera, in which the camera processes original image information obtained in a photographing operation to convert to digital image information and to compress for storage in the memory card and further stores such compressed image information on the memory card, the editing device comprising:
a first reception unit to receive a removable memory card;
a second reception unit to receive a memory device having a relatively large capacity;
a signal processor to decompress the compressed digital image information, stored on a memory card removably received by the first reception unit, to a decompressed digital information; and
a recorder to record the decompressed digital image information on the memory device.

The Watanabe patent and the Sasaki patent, however, cannot be combined as suggested by the rejection. The rejection alleges that “[i]t would have been obvious to one of ordinary skill in the art to modify Watanabe by using the teaching of Sasaki to provide the apparatus of Watanabe with removable medium for storing the expanded image signal in order to preserve the image signal.” Watanabe, however, *only discloses decompressing the image data for display purposes, not for storage*. In fact, Watanabe teaches away from storing decompressed image data. Watanabe teaches compressing the image data for storage purposes, presumably so more images may be stored in a given amount of memory. The compressed image data is only decompressed for display purposes. Thus, storing a decompressed image is contrary to the teachings of Watanabe, and, therefore, cannot be combined with Sasaki as suggested by the rejection.

Even if Watanabe is combined with Sasaki, the combination does not teach, among other things, “a recorder to record the decompressed digital image information on the memory device” as recited in Applicants’ claim 31. Watanabe teaches decompressing the digital image and converting the digital image to *an analog signal* for display purposes. Thus, even if the memory card of Sasaki can replace the display of Watanabe, the

information that would be recorded is *an analog signal*. This is in contrast to Applicants claim that explicitly recites recording *digital image information*.

Additionally, the Watanabe patent fails to disclose “a first reception unit to receive a *removable* memory card.” In discussing the memory 32, Watanabe describes it as “a storage such as a memory card in which, for example, a semiconductor memory is mounted on a substrate in a card-like shape is advantageously employed so as to store therein an encoded still picture.” (The Watanabe patent, column 6, lines 41-47.) This description equally describes an embedded memory card. There is simply no disclosure that the memory 32 is a *removable* memory card as recited in Applicants’ claim 31.

With regard to claim 51, a method is claimed using the device recited in claim 31. As noted above, the cited references do not teach or suggest the apparatus recited in claim 31. Thus, the cited references cannot teach or suggest using the structure of claim 31.

Claim 37 depends from and further limits independent claim 31 in a patentable sense. As discussed above, claim 31 is patentable over the cited references. Thus, for this reason and the reasons set forth above, claim 37 is also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 31, 37, and 51 under 35 U.S.C. § 103(a) as being unpatentable over the Watanabe patent in view of the Sasaki ‘628 patent, be reconsidered and withdrawn.

Claims 31, 37, and 51 (Lang and Sasaki patents)

The rejection of claims 31, 37, and 51 under 35 U.S.C. § 103(a) as being unpatentable over the Lang patent in view of the Sasaki ‘804 patent, is respectfully traversed based on the following.

The Lang patent shows a system for transferring video information (VC R-ET). Input is derived from an analog video recording unit (AVRU) 11, other analog video sources (15, 16) or digital transmissions (17, 18). The information is converted to a digital format, if not already in digital format, and is compressed for storage on memory 13 (column 4, line 63 – column 5, line 24). Memory 13 is internal memory that may use one of several technologies (column 6, lines 8-22). Of importance, there is no suggestion that the internal memory can or should be removable. After the compressed information is stored in memory 13, a blank tape is inserted in to AVRU 11. The information in memory is then decompressed and converted to analog signals for storage in the tape in AVRU 11 (column 9, lines 23-30). In one embodiment, compressed digital information from memory 13 may be transferred to another VCR-ET via telephone lines (column 9, line 55 – column 10, line 6).

The Sasaki patent shows digital camera 10 using a removable memory card 15. Image output from the camera is transferred from image capture circuitry to buffer memory 31₆ and then transferred to memory card 15. Upon each image capture, directory information from the memory card is fetched (column 9, lines 4-15). This information is used to determine if storage space is available on memory card 15 for the captured image. If there is not sufficient space, the image is held in the buffer memory and an alarm is sounded to alert the user (column 9, lines 20-27). Once a new memory card has been inserted, the image held in the buffer memory is immediately stored in the new memory card (column 9, lines 27-28). There is no suggestion to provide permanent storage in any memory other than a memory card.

The rejection continues suggesting that the Lang patent and the Sasaki patent may be combined to make obvious claim 31, which states:

31. An editing device for use with a memory card having a relatively small capacity and for storing image information taken by a camera, in which the camera processes original image information obtained in a photographing operation to convert to digital image information and to compress for storage in the memory card and further

stores such compressed image information on the memory card, the editing device comprising:

- a first reception unit to receive a removable memory card;
- a second reception unit to receive a memory device having a relatively large capacity;
- a signal processor to decompress the compressed digital image information, stored on a memory card removably received by the first reception unit, to a decompressed digital information; and
- a recorder to record the decompressed digital image information on the memory device.

The rejection suggests that it is well known and obvious to replace the memory 13 of the Lang patent with the removable memory card 15 of the Sasaki patent. However, this suggestion is inaccurate. The memory 13 of the Lang patent is an intermediate memory used only for temporary storage, serving the sole purpose of storing the compressed video in preparation of transferring the video to tape. As such, there is absolutely no need, suggestion, or motivation in either the Lang patent or the Sasaki patent to replace the embedded memory 13 of the Lang patent with a replaceable memory card of the Sasaki patent. Furthermore, as an intermediate memory, the memory 13 of the Lang patent is more analogous to the buffer memory 316 of the Sasaki patent. *And there is absolutely no suggestion of replacing an intermediate memory or the buffer memory 316 of the Sasaki patent, with a removable memory card.*

In fact, the Sasaki patent teaches the use of a buffer memory 316 *in conjunction with* the memory card 15. (The Sasaki patent, figure 6A-6B.) Thus, even if a memory card were used in place of the memory 13 of the Lang patent, an intermediate memory would still be required as taught by the Sasaki patent. In other words, the memory card 15 of the Sasaki patent would not replace the memory 13 of the Lang patent, but would be an addition to the apparatus disclosed in the Lang patent. As a result, the apparatus of the Lang patent becomes more complicated without any additional functionality, and, therefore, there is no suggestion or motivation to include a memory card in the design of the apparatus disclosed in Lang.

With regard to claim 51, a method is claimed using the device recited in claim 31. As noted above, the cited references do not teach or suggest the apparatus recited in claim 31. Thus, the cited references cannot teach or suggest using the structure of claim 31.

Claim 37 depends from and further limits independent claim 31 in a patentable sense. As discussed above, claim 31 is patentable over the cited references. Thus, for this reason and the reasons set forth above, claim 37 is also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claims 31, 37, and 51 under 35 U.S.C. § 103(a) as being unpatentable over the Lang patent in view of the Sasaki '804 patent, be reconsidered and withdrawn.

Claim 32

The rejection of claim 32 under 35 U.S.C. § 103(a) as being unpatentable over the Lang patent in view of the Sasaki '804 patent as applied to claim 31 above, and further in view of the Watanabe patent, is respectfully traversed based on the following.

Claim 32 depends from and further limits independent claim 31 in a patentable sense. As discussed above, claim 31 is patentable over the cited references. Thus, for this reason and the reasons set forth above, claim 32 is also deemed to be in condition for allowance.

Accordingly, it is respectfully requested that the rejection of claim 32 under 35 U.S.C. § 103(a) as being unpatentable over the Lang patent in view of the Sasaki '804 patent as applied to claim 31 above, and further in view of the Watanabe patent, be reconsidered and withdrawn.

CONCLUSION

Wherefore, in view of the foregoing amendments and remarks, this application is considered to be in condition for allowance, and an early reconsideration and a Notice of Allowance are earnestly solicited.

This Amendment does not increase the number of independent claims, does not increase the total number of claims, and does not present any multiple dependency claims. Accordingly, no fee based on the number or type of claims is currently due. However, if a fee, other than the issue fee, is due, please charge this fee to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260.

Any fee required by this document other than the issue fee, and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's Deposit Account No. 18-1260. Any refund should be credited to the same account.


If an extension of time is required to enable this document to be timely filed and there is no separate Petition for Extension of Time filed herewith, this document is to be construed as also constituting a Petition for Extension of Time Under 37 C.F.R. § 1.136(a) for a period of time sufficient to enable this document to be timely filed.

Any other fee required for such Petition for Extension of Time and any other fee required by this document pursuant to 37 C.F.R. §§ 1.16 and 1.17, other than the issue fee,

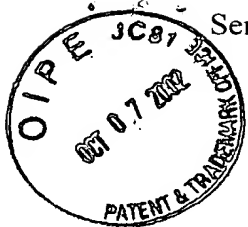
and not submitted herewith should be charged to Sidley Austin Brown & Wood LLP's
Deposit Account No. 18-1260. Any refund should be credited to the same account.

Respectfully submitted,

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APPENDIX

VERSION WITH MARKINGS TO SHOW CHANGES MADE

The following is a marked-up version of the changes to the claims which are being made in the attached response to the Office Action dated May 1, 2002.

IN THE CLAIMS:

20. (Nine Times Amended) A camera comprising:

- a camera body;
- an imaging device to conduct a photographing operation, wherein following a photographing operation said imaging device outputs image information;
- a first connection adapted to be connected to a first semiconductor memory;
- a second connection adapted to be connected to a second semiconductor memory;
- a buffer memory for temporarily storing image information so that the stored image information is transmitted to said second semiconductor memory from said buffer memory;
- a recorder which stores image information, outputted from said imaging device, on one of the first semiconductor memory and the second semiconductor memory;
- a detector to detect, upon each photographing operation, a memory condition; and
- a changer, coupled to said detector, to selectively determine which one of the first and second semiconductor memories is used to store image information outputted from said imaging device based on a detected condition by said detector, and change between a first condition [, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory,] and a second condition, [in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector.] wherein image information outputted from said imaging device is to be directed to the first connection for storage on a connected first semiconductor memory in the first condition, and image information

outputted from said imaging device is to be directed to the second connection for storage on a connected second semiconductor memory in the second condition.

40. (Seven Times Amended) A camera comprising:

a camera body;

an imaging device to conduct a photographing operation, wherein following a photographing operation said imaging device outputs image information;

a first connection adapted to be connected to a first memory;

a second connection adapted to be connected to a second memory;

a recording device to store image information on one of the first memory and the second memory;

a detector to detect, upon each photographing operation, an available memory capacity and to output a signal representative of a result of such a detection; and

a buffer memory for temporarily storing image information so that the stored image information is directed to said second memory from said buffer memory;

a first changer to selectively determine which one of the first and second semiconductor memories is used to store image information outputted from said imaging device based on a detected condition by said detector, and change between a first condition[, in which image information outputted from said imaging device is directed to the first connection for storage in the first memory,] and a second condition, [in which image information outputted from said imaging device is directed to the second memory] wherein image information outputted from said imaging device is to be directed to the first connection for storage on a connected first semiconductor memory in the first condition, and image information outputted from said imaging device is to be directed to the second connection for storage on a connected second semiconductor memory in the second condition;

a reproduction device to receive and reproduce image information stored on and outputted from one of the first memory and the second memory; and

a second changer to select one of the first memory and the second memory to provide image information to the reproduction device for reproduction.

43. (Six Times Amended) A camera comprising:

- a camera body;
- an imaging device to conduct a photographing operation, wherein following a photographing operation said imaging device outputs image information;
- a first SRAM memory capable of storing image information corresponding to at least two photographic frames;
- a second SRAM memory, wherein at least one of said first SRAM memory and the second SRAM memory is provided in the camera body;
- a buffer memory for temporarily storing image information so that the stored image information is transmitted to said second semiconductor memory from said buffer memory;
- a recording device provided within the camera body for selectively storing image information on one of the first SRAM memory and the second SRAM memory;
- a detector to detect, upon each photographing operation, a condition of one of the first SRAM memory or the second SRAM memory; and
- a changer, provided within the camera body, for causing said recording device to selectively determine which one of the first and second SRAM memories is used to store image information outputted from said imaging device based on a detected condition by said detector, and change from a first condition[, in which image information outputted from said imaging device is stored on the first SRAM memory,] and a second condition, [in which image information outputted from said imaging device is stored on the second SRAM memory based on a detected condition of one of the first SRAM memory and the second SRAM memory.] wherein image information outputted from said imaging device is to be directed to the first connection for storage on a connected first SRAM memory in the first condition, and image information outputted from said imaging device is to be directed to the second connection for storage on a connected second SRAM memory in the second condition.

49. (Three Times Amended) A camera comprising:

- a camera body;
- an imaging device to conduct a photographing operation, wherein following a photographing operation said imaging device outputs image information;
- a first connection adapted to be connected to a first semiconductor memory;
- a second connection adapted to be connected to a second semiconductor memory;
- a buffer memory for temporarily storing image information so that the stored image information is transmitted to said second semiconductor memory from said buffer memory;
- a recorder which stores image information, outputted from said imaging device, on one of the first semiconductor memory and the second semiconductor memory;
- a detector to detect, upon each photographing operation, a memory condition;
- a changer, coupled to said detector, to selectively determine which one of the first and second semiconductor memories is used to store image information outputted from said imaging device based on a detected condition by said detector, and change between a first condition[, in which image information outputted from said imaging device is directed to the first connection for storage on a connected first semiconductor memory,] and a second condition, [in which image information outputted from said imaging device is directed to the second connection for storage on a connected second semiconductor memory based on a detected condition by said detector] wherein image information outputted from said imaging device is to be directed to the first connection for storage on a connected first semiconductor memory in the first condition, and image information outputted from said imaging device is to be directed to the second connection for storage on a connected second semiconductor memory in the second condition; and
- an alarm mechanism to alert a user of a detected memory condition.

51. (Once Amended) A method to edit image information in an editing device for a camera capable of receiving a memory card, in which the camera processes original image information obtained in a photographing operation in a manner suitable for storage and further stores such processed image information on the memory card, wherein the

editing device includes a first reception unit to receive a removable memory card and a second reception unit to receive a memory device, the method comprising the steps of:

receiving image information from [a] the removable memory card received within the first reception unit;

restoring received image information to original image information originally obtained in a photographing operation; and

recording restored image information on a memory device received within the second reception unit.